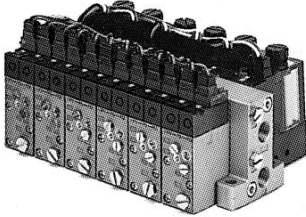
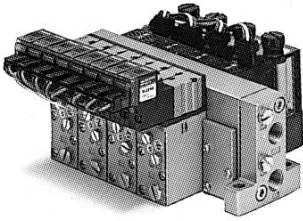


Ejector System/Manifold Specifications



Function

Max. number of units	8 units
Function	Supply air from PV port of manifold for common supply.

When Using Individual Spacer R1

Function	Separates air supply from manifold and allows units to be used one by one.
----------	--

Standard Specifications

Port	Port size	Function
PV port	Rc 1/8	Air supply
EXH port	Rc 1/8	Common exhaust
Weight	1 station: 73 g (50 g per additional station)	

Note 1) PD port: Blank

Note 2) Exhaust air from both sides for 4 or more stations of ZX1103 manifold.

Air Supply

Supply port location	Manifold Port	Left side		Right side	
		PV	PS	PV	PS
L (Left)		○	●	●	●
R (Right)		●	●	○	●
B (Both sides)		○	●	○	●

○: Supply ●: Plugged (EXH port is released to atmospheric pressure.)

Note) Blank plugs are attached to all ports of each valve unit.



Manifold Specification Sheet

When ordering the manifold type of series ZX, use the manifold specification sheet on page 13-14-18.

When Using Individual Spacer R1

It functions as a single unit. Air is supplied from PV port of valve unit. PE port is released to atmospheric pressure. Other ports are plugged.
 Note) When using individual spacer R1, other valves should be provided with dummy spacer R16. Functions are the same with the standard; common supply from the manifold.

How to Order Manifold

Indicate the vacuum module, blank plate and individual spacer below the manifold base part number.

<Manifold base>

ZZX1 06 — [] — R

Stations	
01	1
02	2
⋮	⋮
08	8

Thread of supply and exhaust valve

Nil	Rc
F	G
T	NPTF

(Ordering example)

ZZX106-R.....1 pc. (Manifold base)

*ZX1101-K15LZ-EC.....5 pcs. (Vacuum single unit)

*ZX1-BM1.....1 pc. (Blank plate)

First station from the valve side

Supply port location

R	Right side (PV port on the right side)
L	Left side (PV port on the left side)
B	Both sides (PV port on both sides)

*1 Viewed from the front side of valve unit, confirm the port location on the right and/or left side.

*2 EXH ports are released to atmospheric pressure in both sides. Plugs are always attached to PD ports and all ports of the valve unit.

<Individual spacer>

ZX1 — R1 — 1

Arrangement

(First station from the right end of the valve side is station 1.)

Nil	All stations
1	Station 1 only
⋮	⋮
8	Station 8 only

*When spacers are mounted alternately, specify them together.

(Ordering example)

If installed on station 1 and station 3:

ZZX106-R1 pc.

*ZX1101-K15LZ-EL6 pcs.

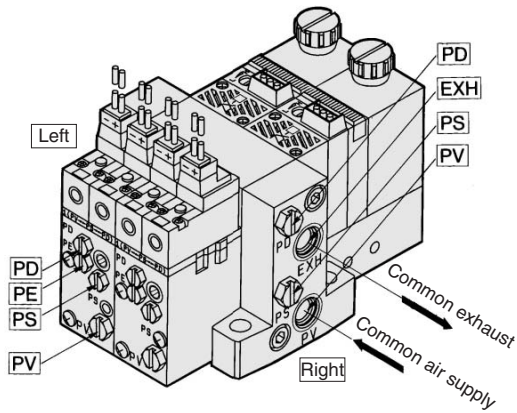
*ZX1-R1-1

*ZX1-R1-3

*ZX1-R164 pcs.

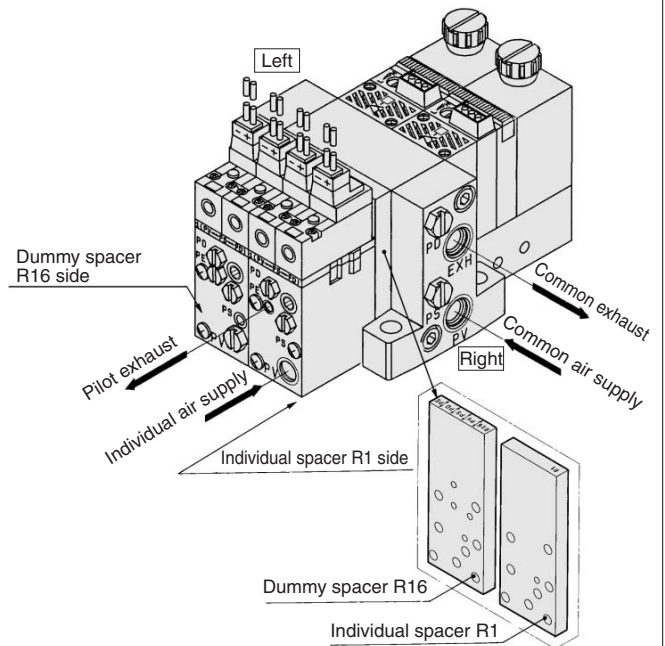
Manifold/System Circuit Example

When not using individual air pressure supply

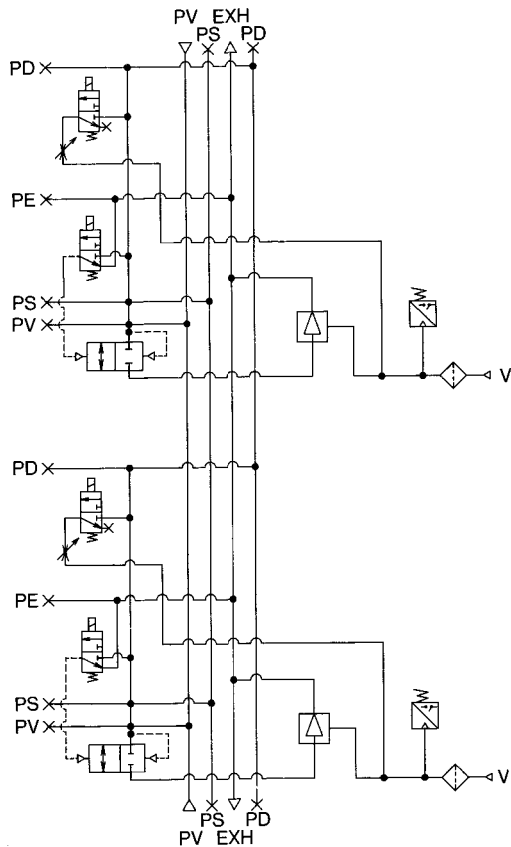


PV: Air supply port
PS: Supply valve supply pressure port
PD: Air supply port for release valve
PE: Pilot exhaust port
EXH: Common exhaust port

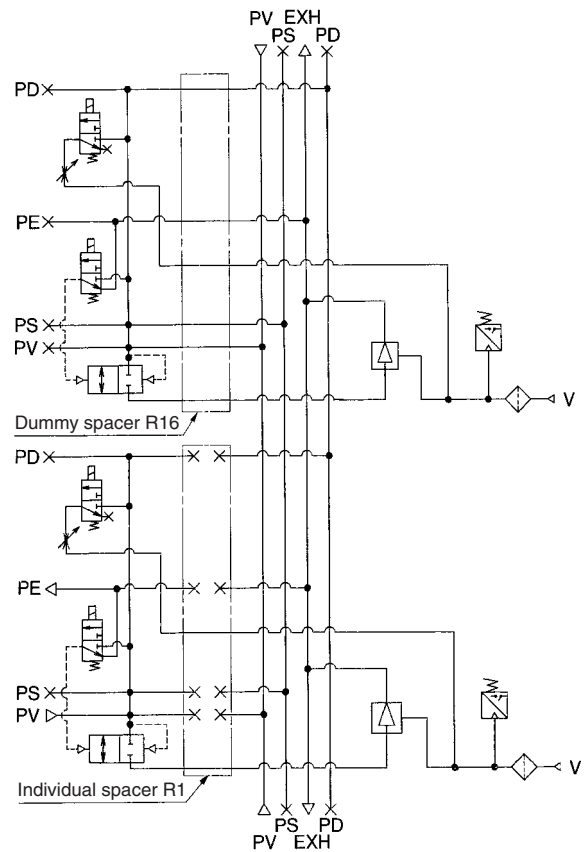
When using individual air pressure supply



<System circuit example>



<System circuit example>



ZX

ZR

ZM

ZH

ZU

ZL

ZY

ZQ

ZF

ZP

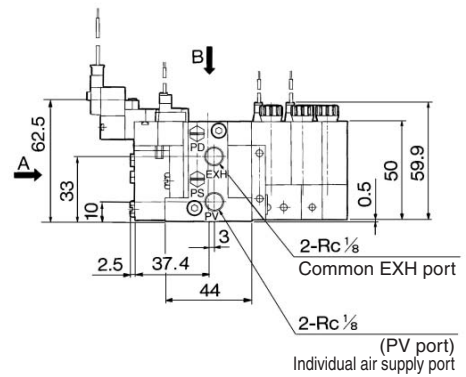
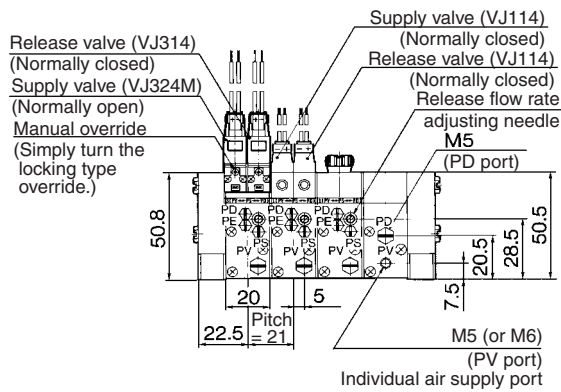
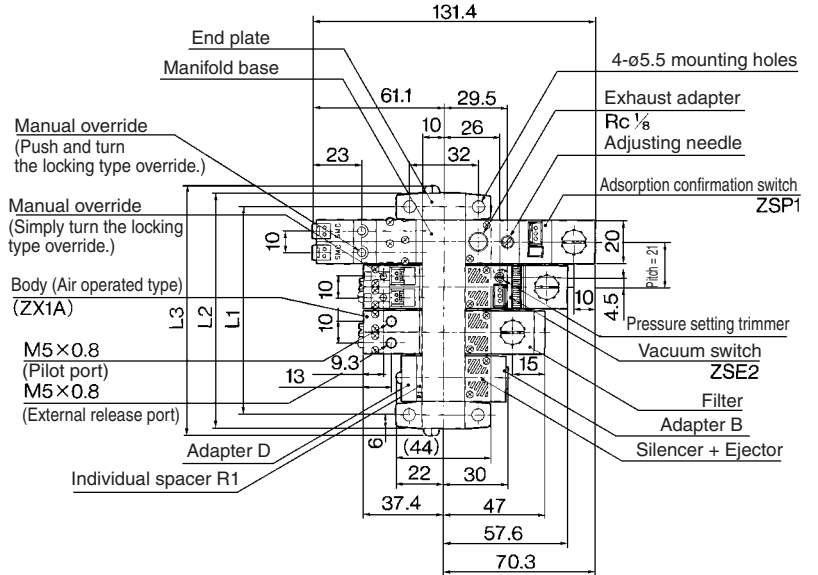
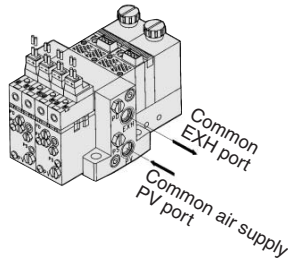
ZCU

AMJ

Misc.

Series ZX

Ejector System Manifold

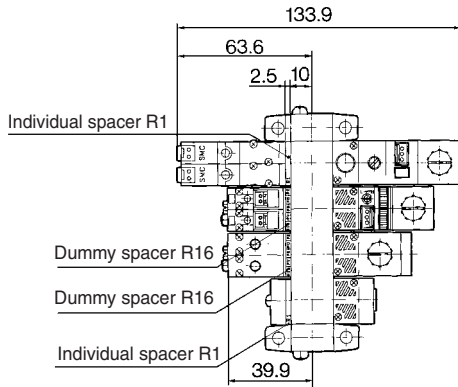


(mm)

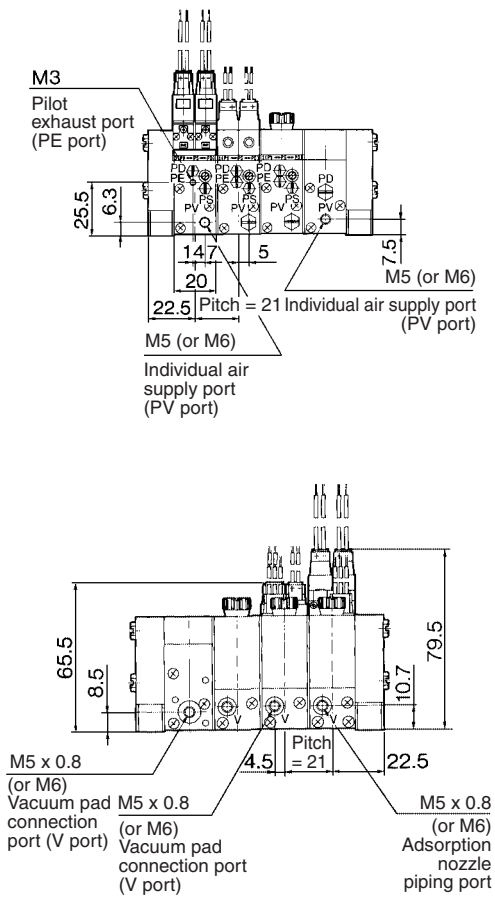
Symbol	Stations	1	2	3	4	5	6	7	8
L1		33	54	75	96	117	138	159	180
L2		45	66	87	108	129	150	171	192
L3		50	71	92	113	134	155	176	197

(In the case of individual air pressure supply)

B cross section



A cross section

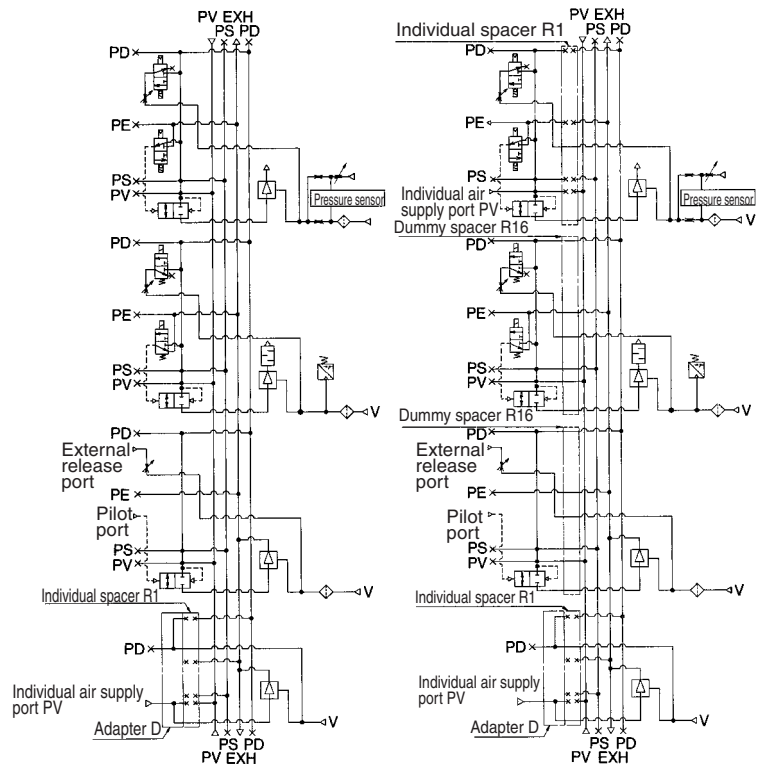


System circuit example

(Standard)

(Option)

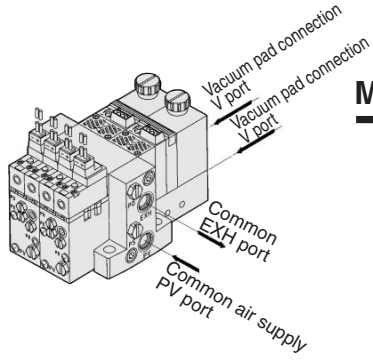
(In the case of individual vacuum pressure supply)



- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Series ZX

Ejector System

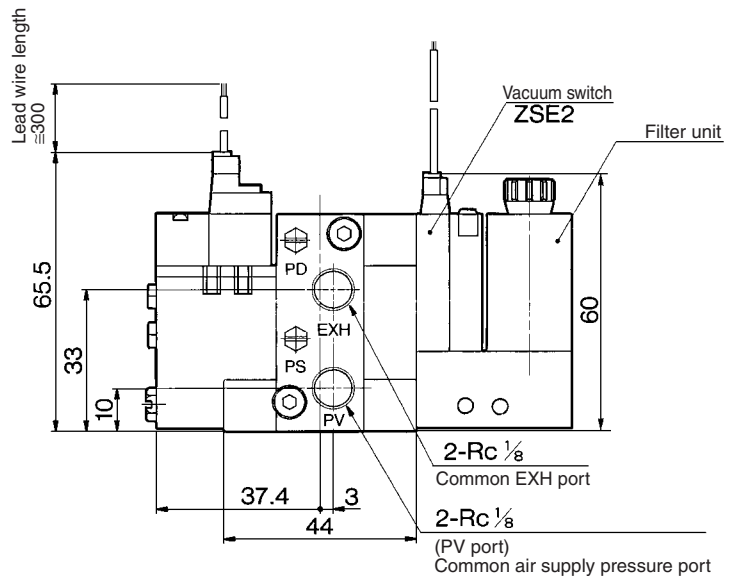
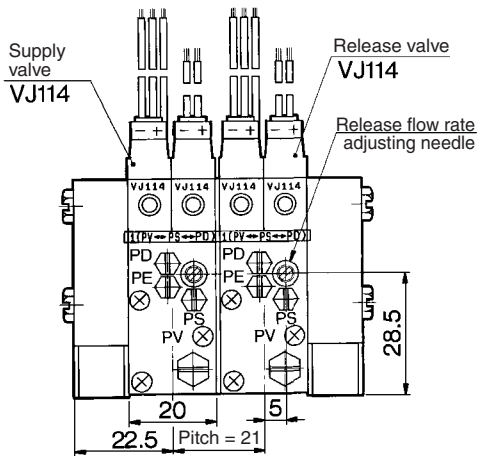
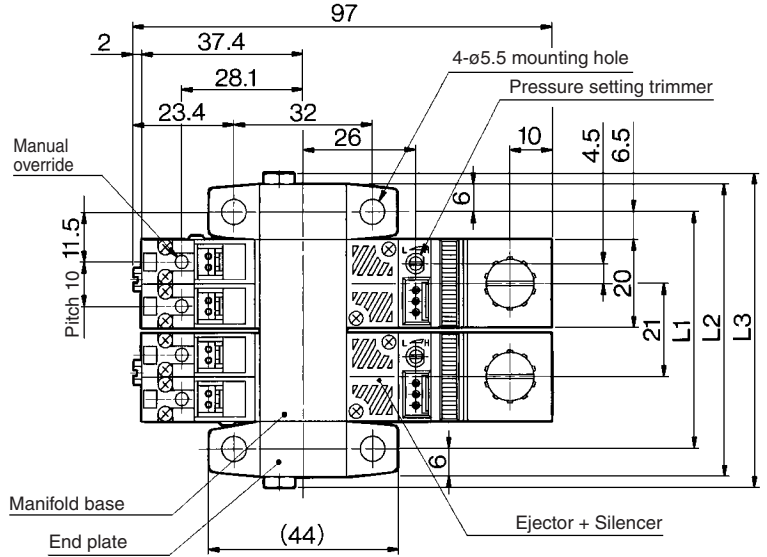


Manifold: Type K1

Type K1

ZZX1□□-□□

ZX1□□□-K1□L□-E□-□

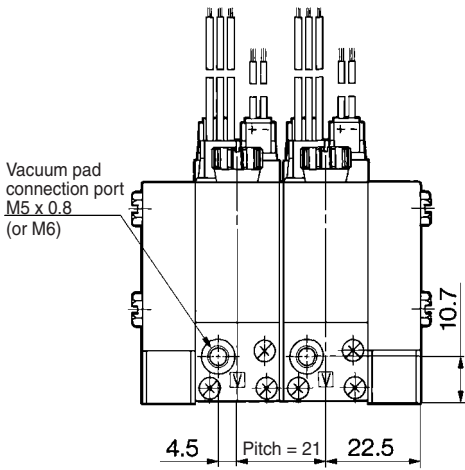
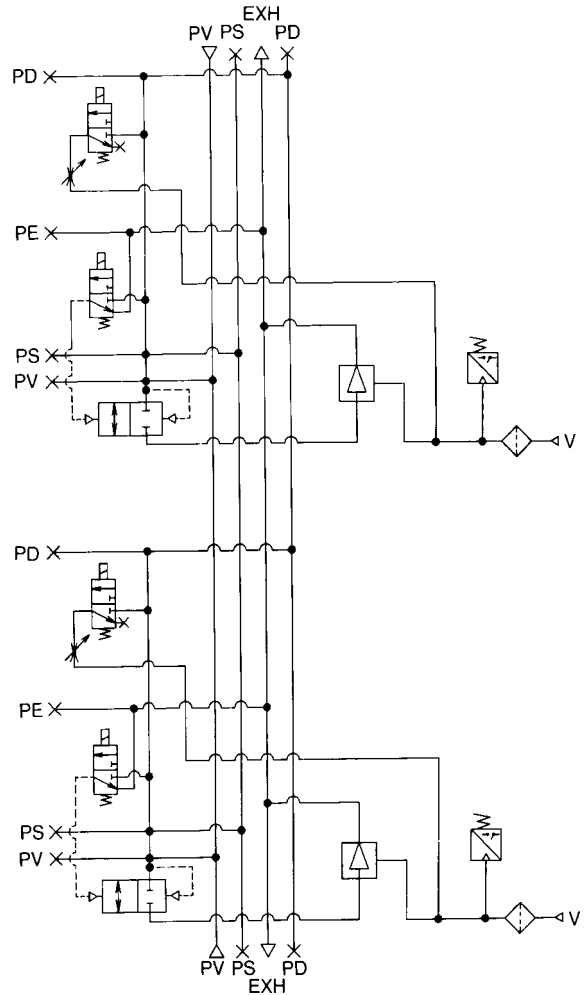


(mm)

Symbol	Stations	1	2	3	4	5	6	7	8
L1		33	54	75	96	117	138	159	180
L2		45	66	87	108	129	150	171	192
L3		50	71	92	113	134	155	176	197

ZX
ZR
ZM
ZH
ZU
ZL
ZY
ZQ
ZF
ZP
ZCU
AMJ
Misc.

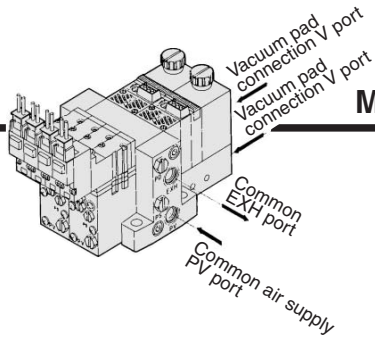
Circuit diagram



Series ZX

Ejector System

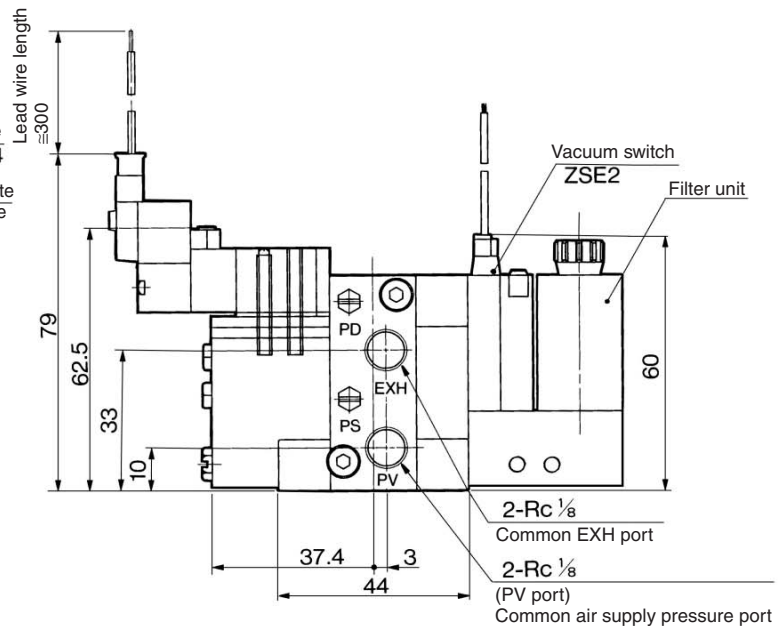
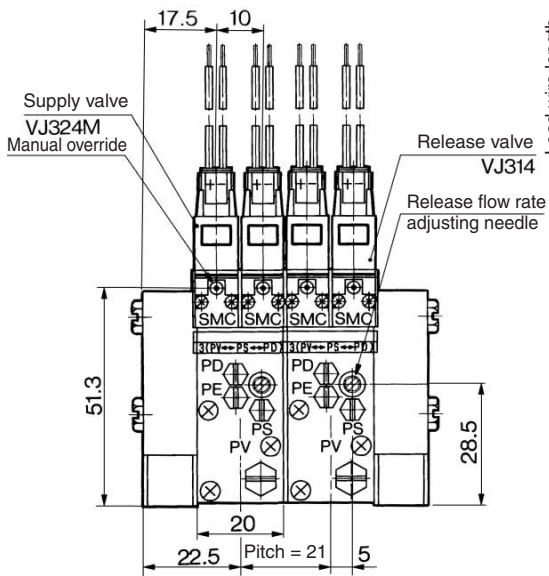
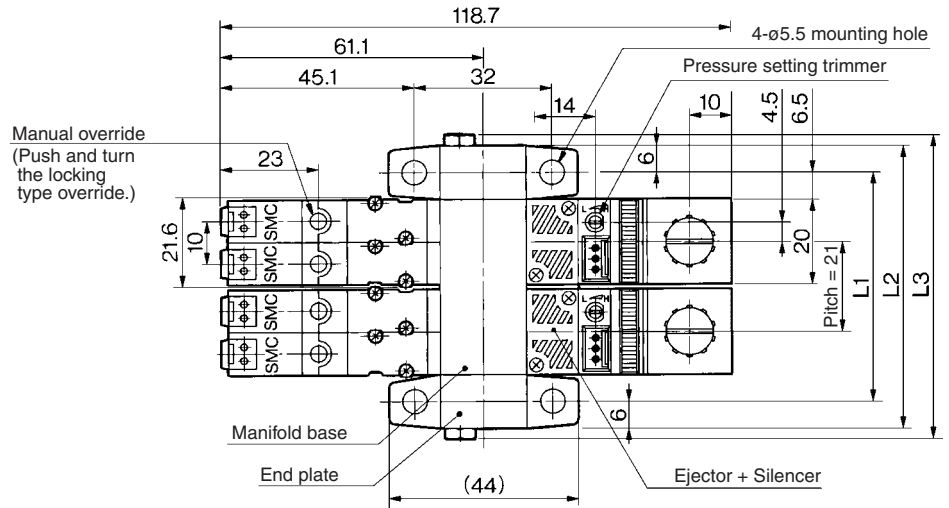
Manifold: Type K3



Type K3

ZZX1□□-□□

ZX1□□□-K3□□□-E□-□

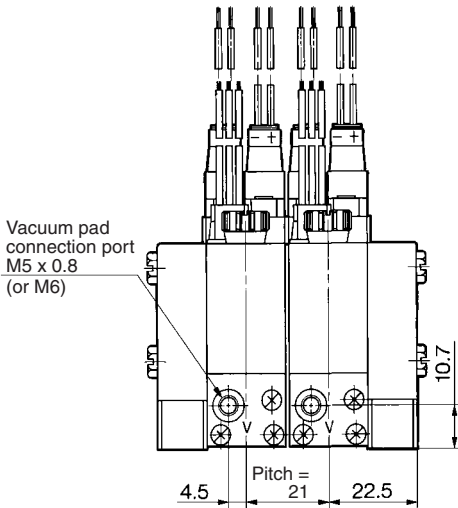
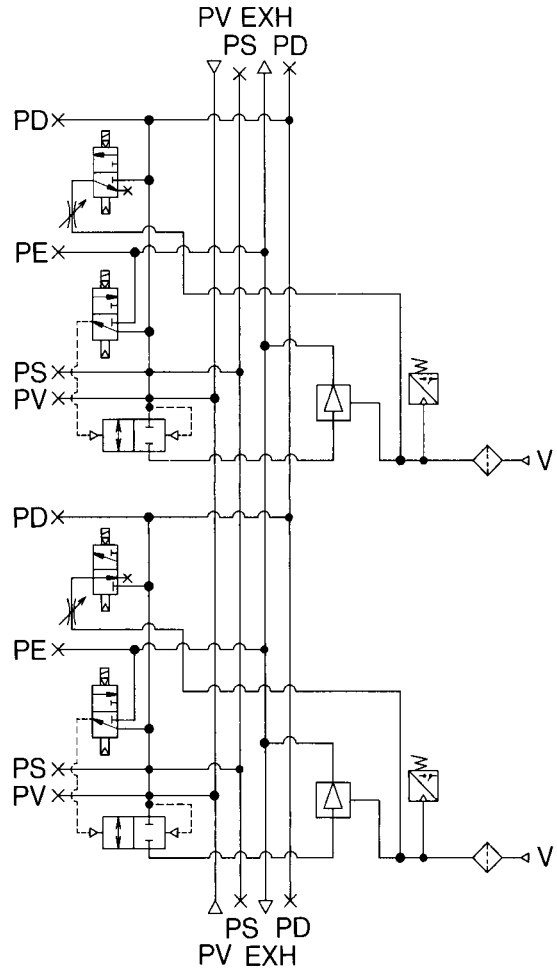


(mm)

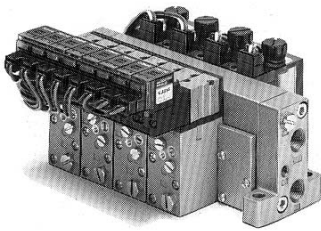
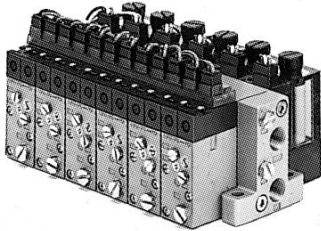
Symbol	Stations	1	2	3	4	5	6	7	8
L1		33	54	75	96	117	138	159	180
L2		45	66	87	108	129	150	171	192
L3		50	71	92	113	134	155	176	197

- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Circuit diagram



Vacuum Pump System/Manifold Specifications



Function

Max. number of units	8 units
Function	Vacuum supply from PV port of the manifold is common supply. Air supply from PS port is common supply.

When Using Individual Spacer R1

Function	Separates air supply from manifold and makes units be used one by one.
----------	--

Specifications

Port	Port size	Function
PV port	Rc 1/8	External vacuum pump connection
PS port	M5	Air supply for vacuum valve
EXH port	Rc 1/8	Common exhaust
Weight	1 station: 73 g (50 g per additional station)	

Note 1) PD port: Blank

Note 2) Vacuum from both sides of PV port for 6 or more stations of ZX100 external vacuum pump manifold.

Air Supply

Supply port location	Manifold Port		Left side		Right side	
	PV	PS	PV	PS	PV	PS
L	○	○	●	○	○	○
R	○	○	○	○	○	○
B	○	○	○	○	○	○

○: Vacuum supply from PV port ○: Air supply from PS port

●: Plugged

Note) All ports for each valve unit are provided with plugs.



Manifold Specification Sheet

When ordering the manifold type of series ZX, use the manifold specification sheet on page 13-14-19.

When Using Individual Spacer R1

It functions as a single unit. Vacuum is supplied from PV port of valve unit. PE port is released to atmospheric pressure. Other ports are plugged.

How to Order Manifold

Indicate the vacuum module, blank plate and individual spacer below the manifold base part number.

<Manifold base>

ZZX1 06 [] R

Stations

01	1
02	2
⋮	⋮
08	8

Thread of supply and exhaust valve

Nil	Rc
F	G
T	NPTF

Supply port location

Symbol	Supply port location *1	Air Supply	
		Vacuum supply	Air supply
R	Right side	PV port on the right side	PS port on the right side
L	Left side	PV port on the left side	PS port on the left side
B	Both sides	PV port on both sides	PS port on both sides

* 1 Viewed from the front side of valve unit, confirm the port location on the right and/or left side.

* 2 EXH ports are released to atmospheric pressure in both sides. Plugs are always attached to PD ports and all ports of the valve unit.

(Ordering example)

ZZX106-R..... 1 pc. (Manifold base)
 *ZX100-K15LZ-EC..... 5 pcs. (Vacuum single unit)
 *ZX-BM1..... 1 pc. (Blank plate)

<Individual spacer>

ZX1 — R1 — 1

Arrangement

(First station from the right end of the valve side is station 1.)

Nil	All stations
1	Station 1 only
⋮	⋮
8	Station 8 only

* When spacers are mounted alternately, specify them together.

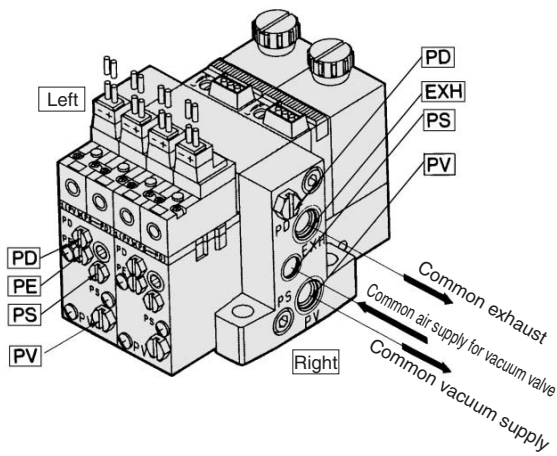
(Ordering example)

If mounted on station 1 and station 3:

ZZX106-R 1 pc.
 *ZX100-K15LZ-EC..... 6 pcs.
 *ZX1-R1-1
 *ZX1-R1-3
 *ZX1-R16..... 4 pcs.

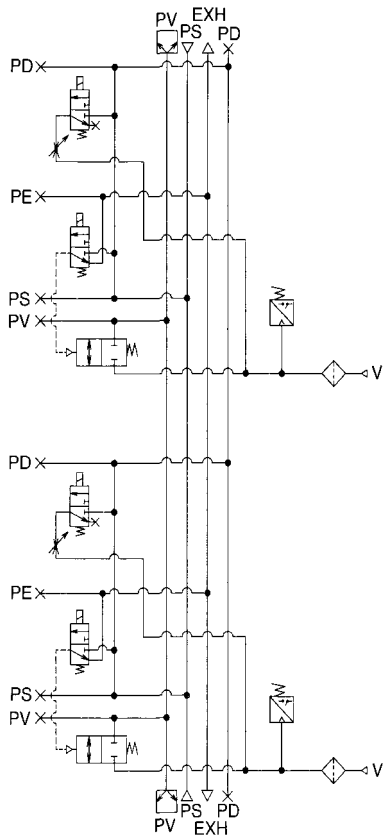
Manifold/System Circuit Example

When not using individual air pressure supply

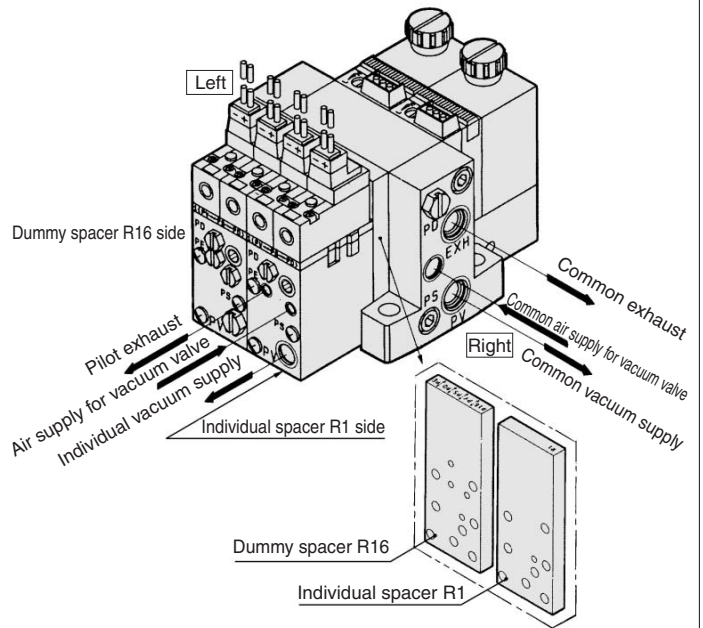


PV: Vacuum supply port
PS: Air supply port for vacuum valve
PD: Air supply port for release valve
PE: Pilot exhaust port
EXH: Common exhaust port

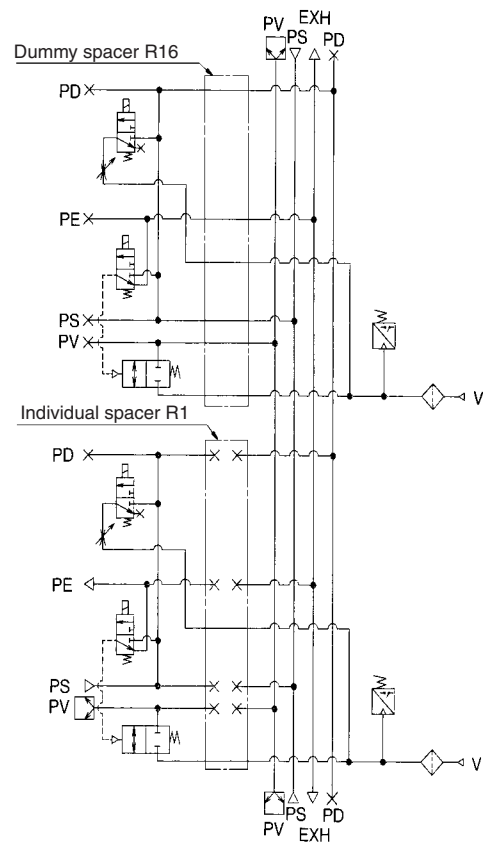
<System circuit example>



When using individual air pressure supply



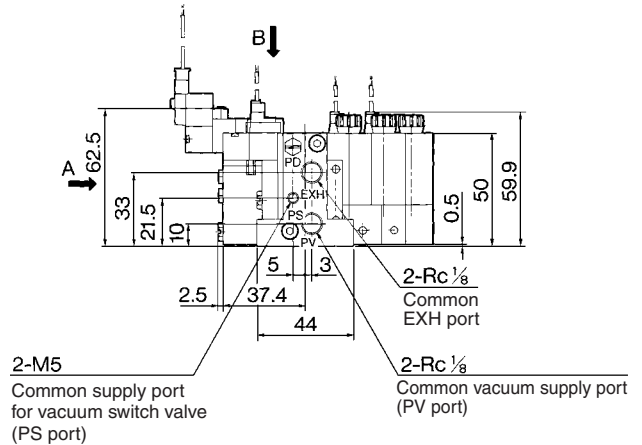
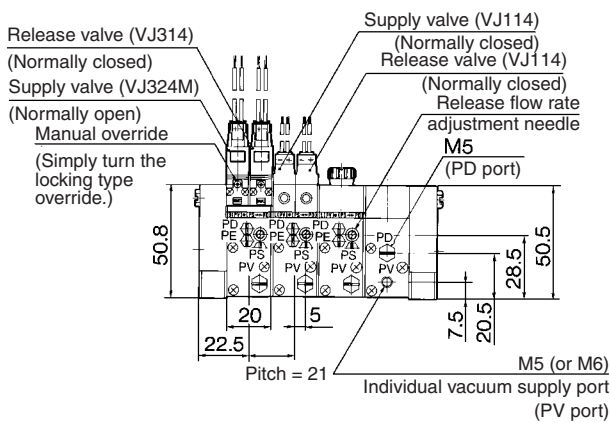
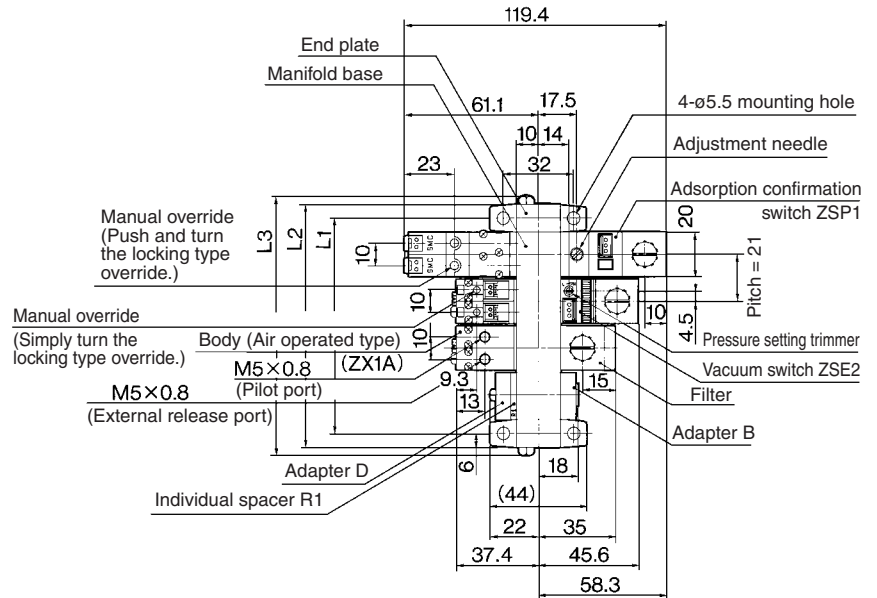
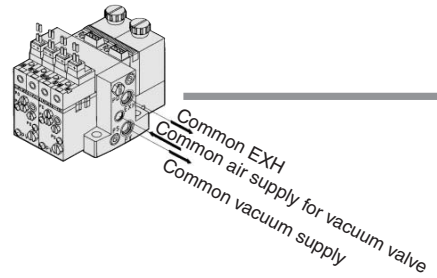
<System circuit example>



- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Series ZX

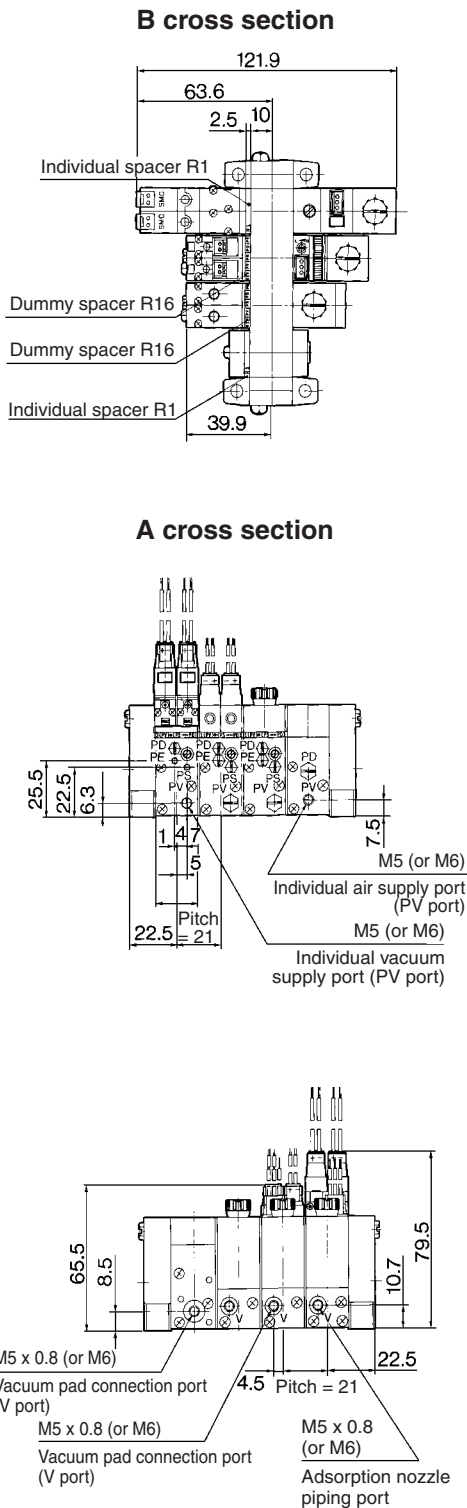
Vacuum Pump System Manifold



(mm)

Symbol	Stations	1	2	3	4	5	6	7	8
L1		33	54	75	96	117	138	159	180
L2		45	66	87	108	129	150	171	192
L3		50	71	92	113	134	155	176	197

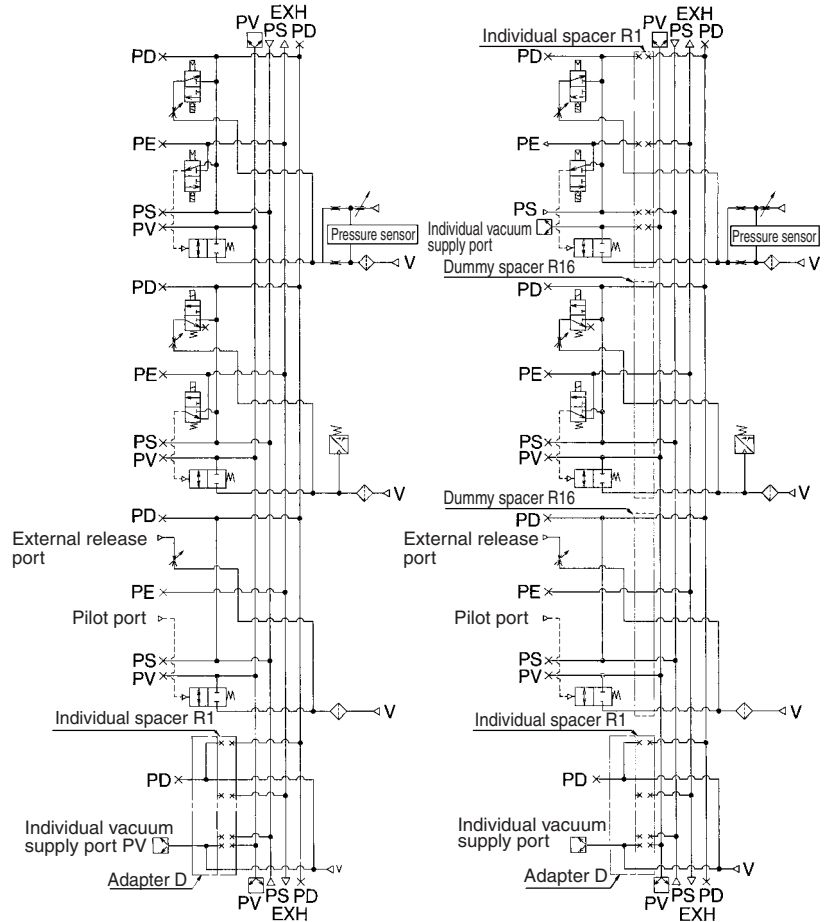
(In the case of individual air pressure supply)



System circuit example

(Standard)

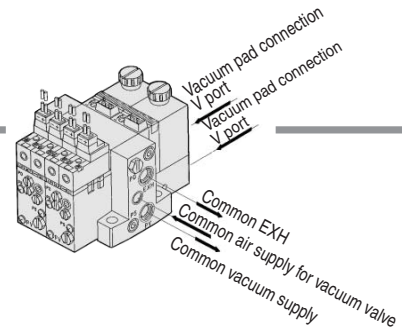
(Option)
(In the case of individual vacuum pressure supply)



- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Series ZX

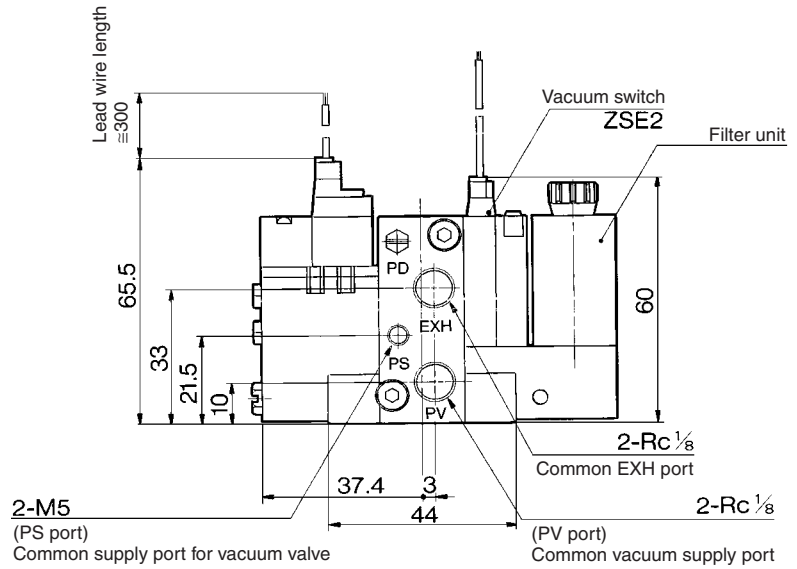
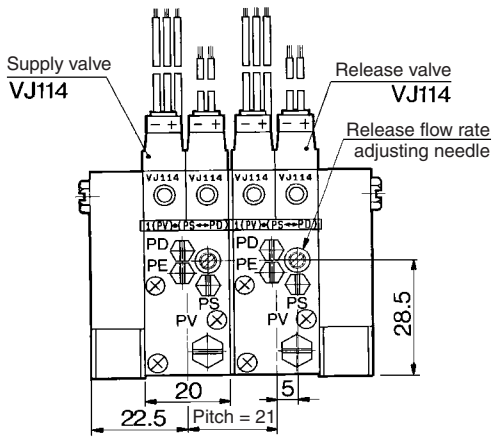
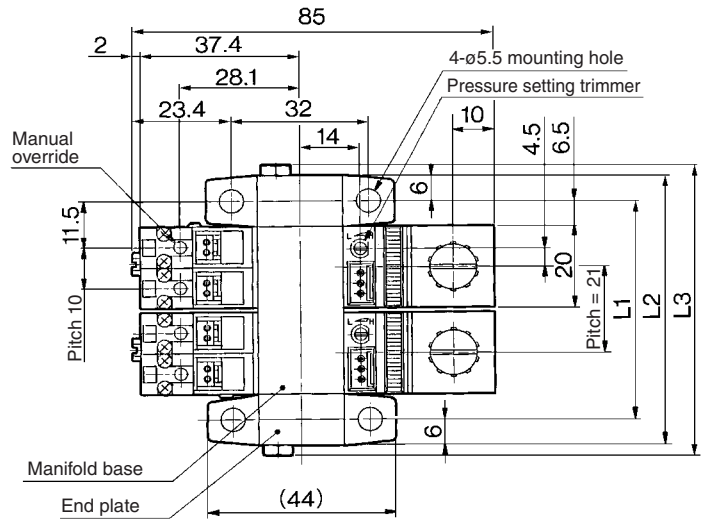
Vacuum Pump System Manifold: Type K1



Type K1

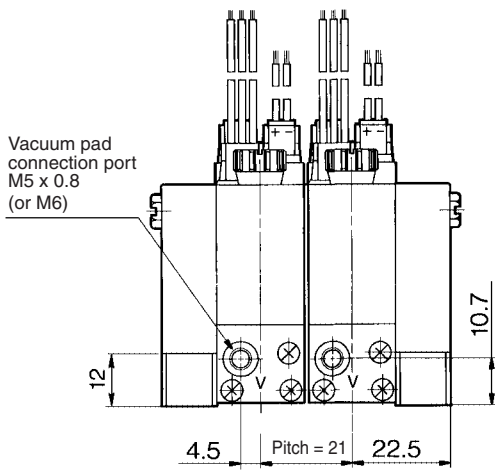
ZZX1□□-□□

ZX100-K1□L□-E□-□

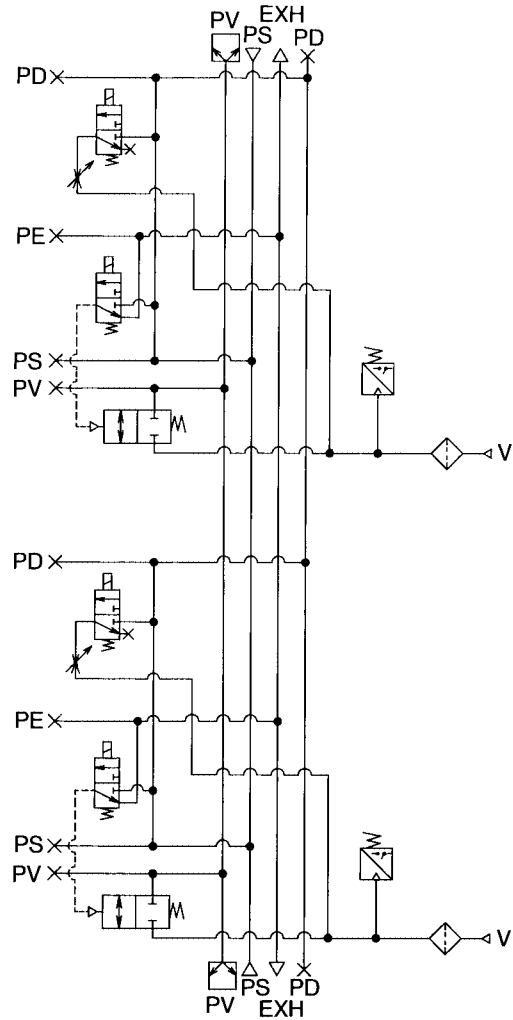


(mm)

Symbol	Stations	1	2	3	4	5	6	7	8
L1		33	54	75	96	117	138	159	180
L2		45	66	87	108	129	150	171	192
L3		50	71	92	113	134	155	176	197



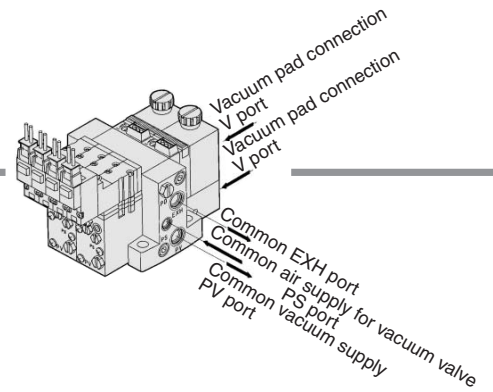
Circuit diagram



- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Series ZX

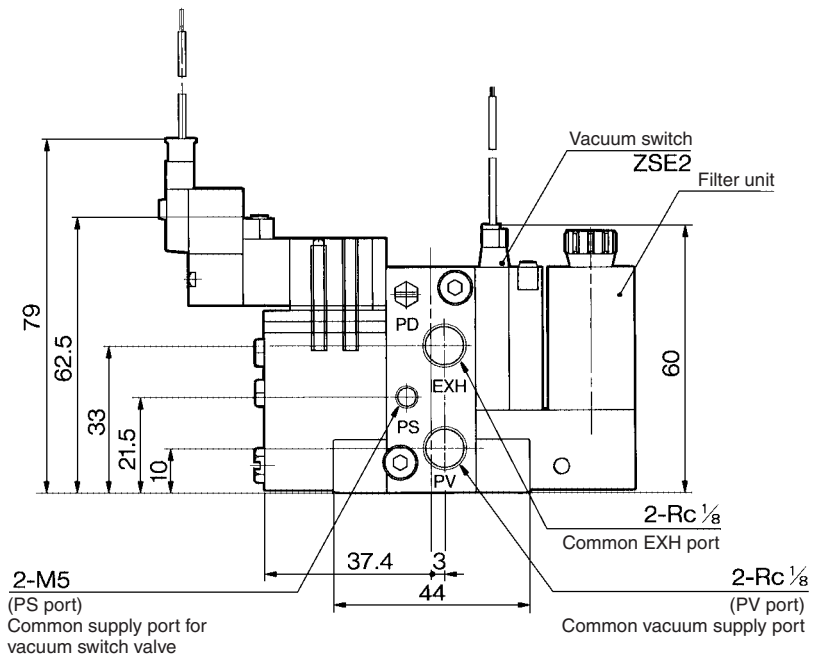
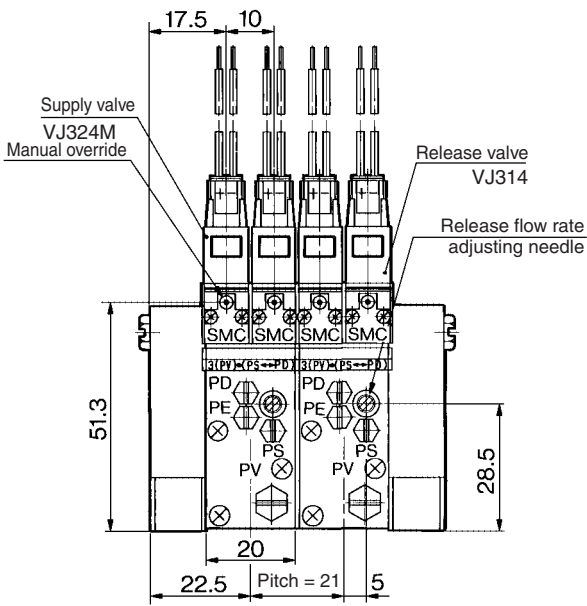
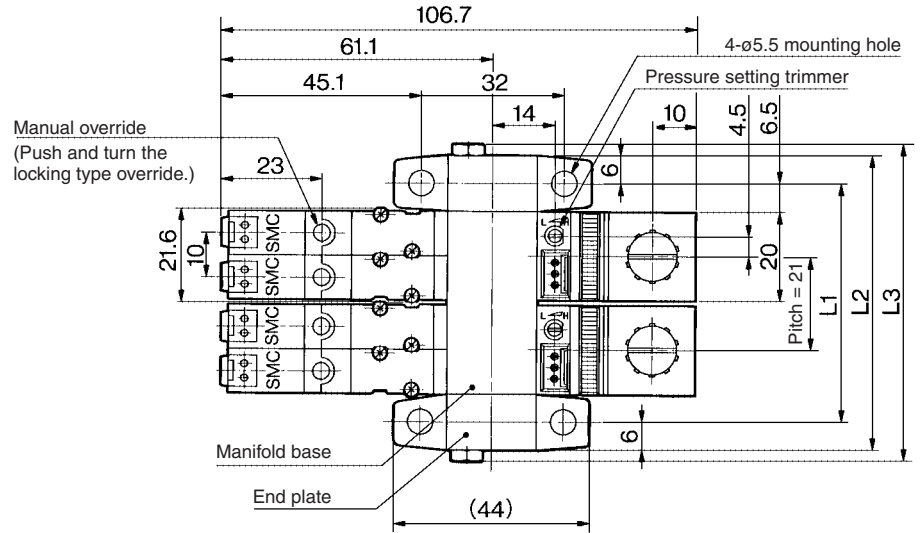
Vacuum Pump System Manifold: Type K3



Type K3

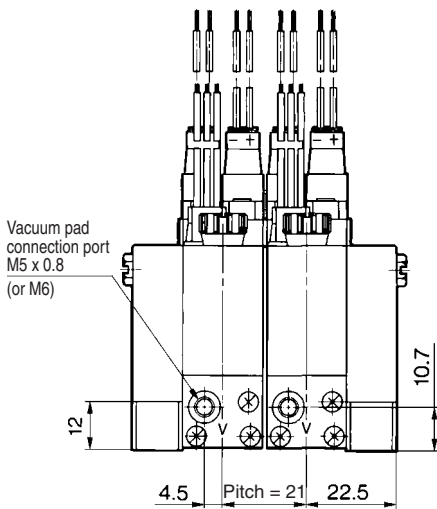
ZZX1□□-□□

ZX100-K3□□□-E□-□

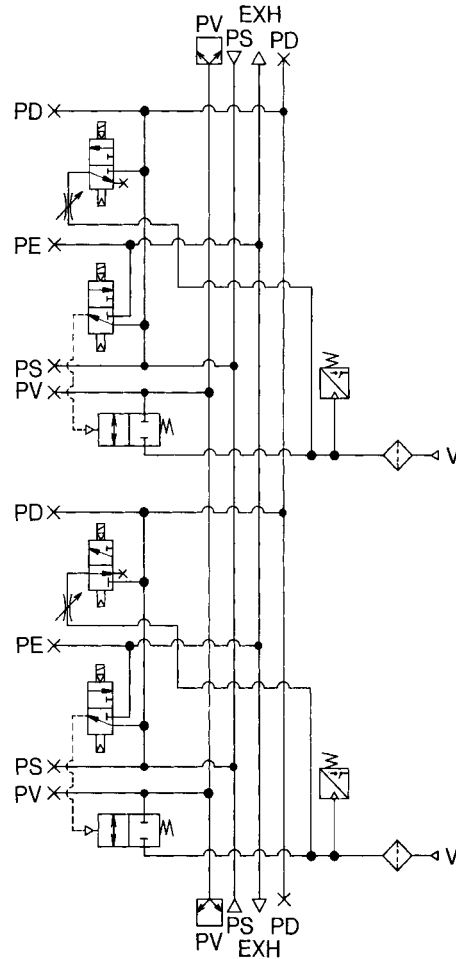


(mm)

Symbol	Stations	1	2	3	4	5	6	7	8
L1		33	54	75	96	117	138	159	180
L2		45	66	87	108	129	150	171	192
L3		50	71	92	113	134	155	176	197

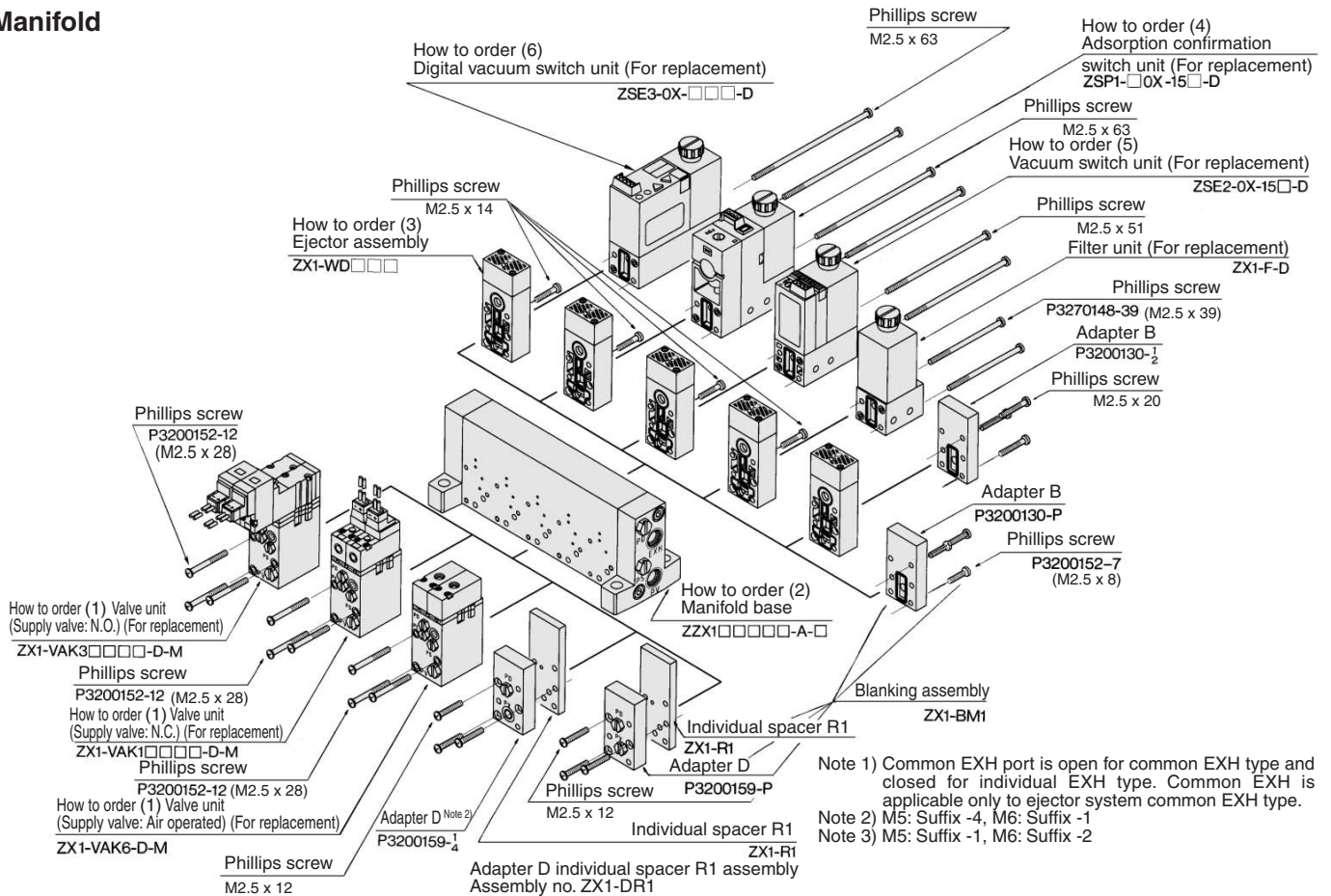


Circuit diagram



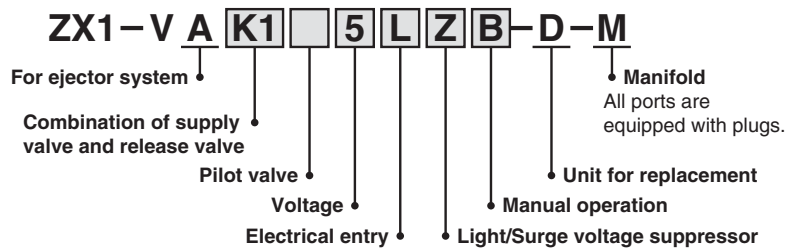
- ZX
- ZR
- ZM
- ZH
- ZU
- ZL
- ZY
- ZQ
- ZF
- ZP
- ZCU
- AMJ
- Misc.

Manifold

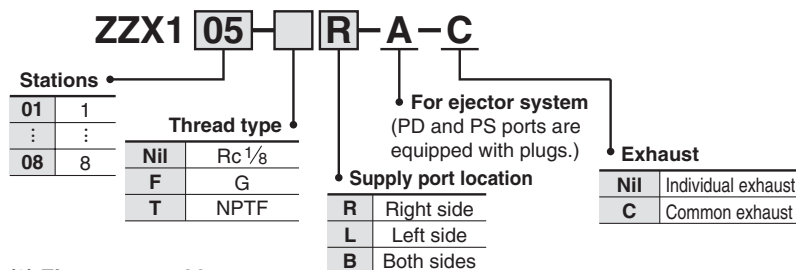


How to Order Unit for Replacement

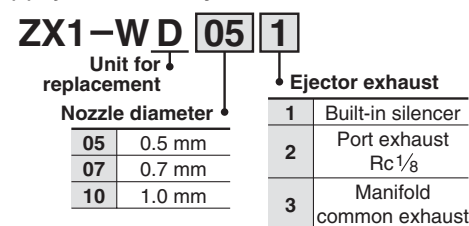
(1) Valve unit * Refer to page 13-2-10 for details.



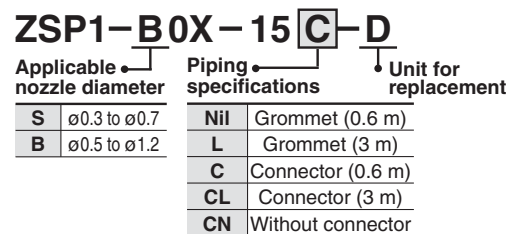
(2) Manifold base



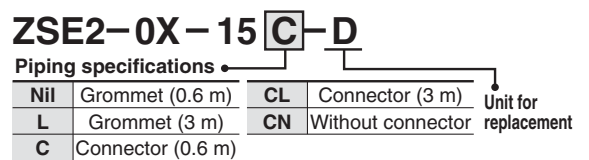
(3) Ejector assembly



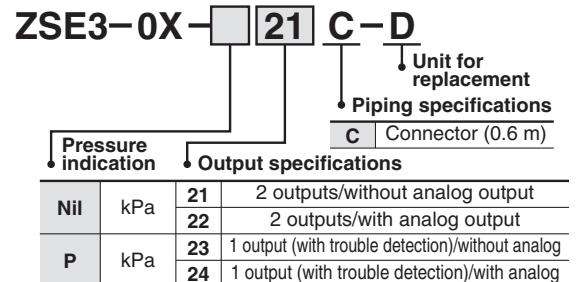
(4) Adsorption confirmation switch unit



(5) Vacuum switch unit



(6) Digital vacuum switch unit



Note) Analog output is available only on grommet type.

ZX

ZR

ZM

ZH

ZU

ZL

ZY

ZQ

ZF

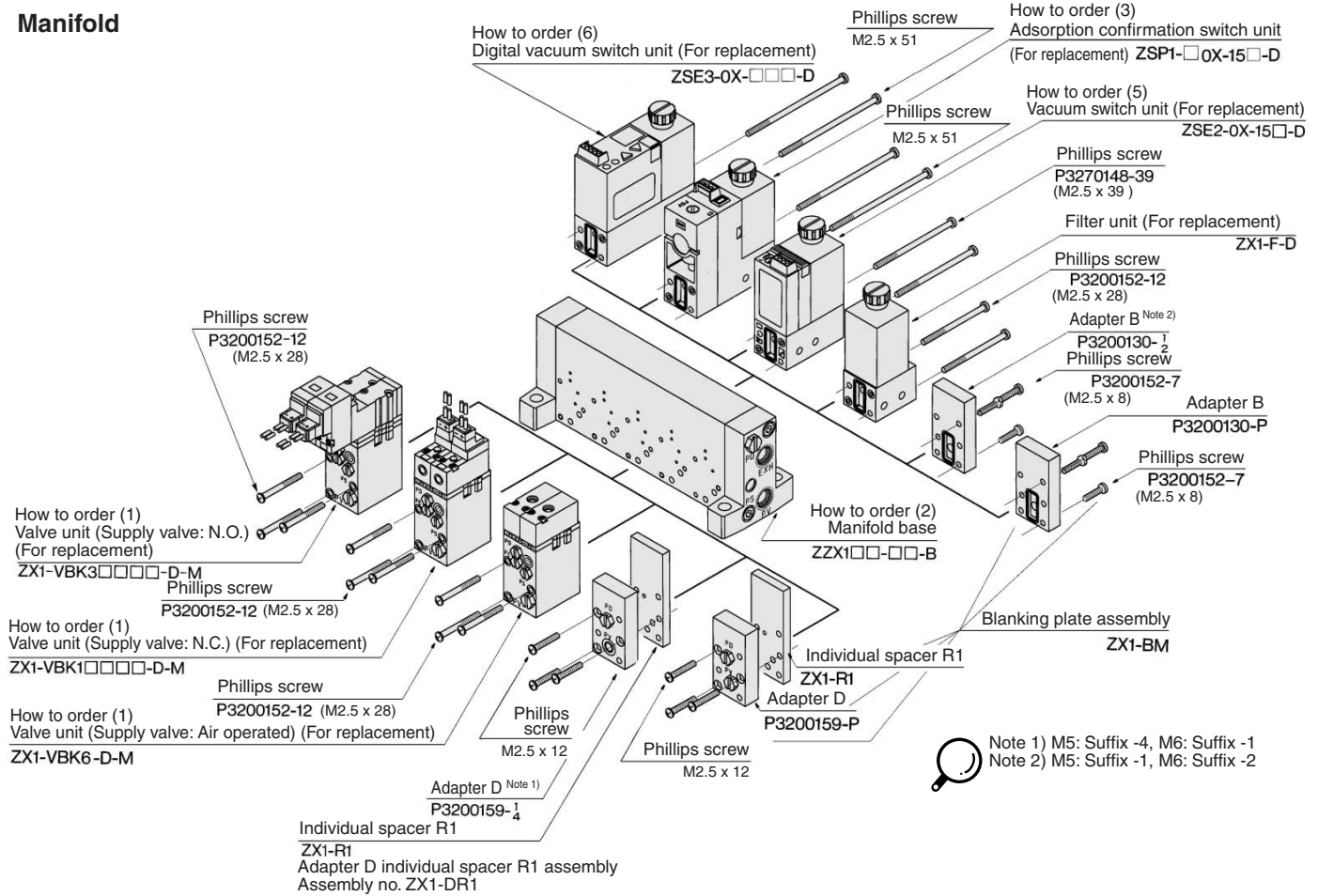
ZP

ZCU

AMJ

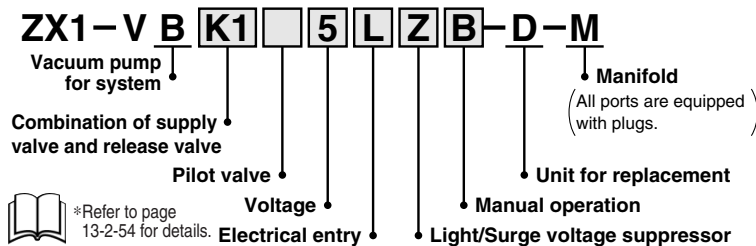
Misc.

Manifold

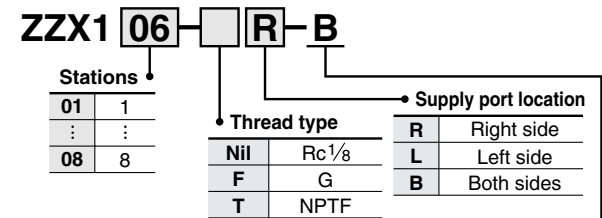


How to Order Unit for Replacement

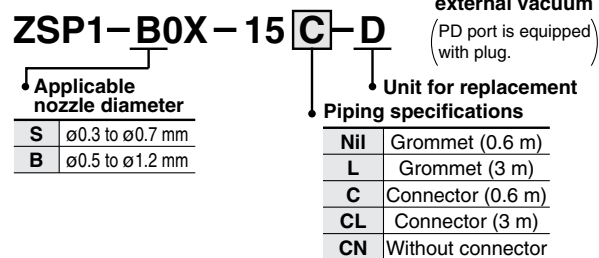
(1) Valve unit * Refer to page 13-2-44 for details.



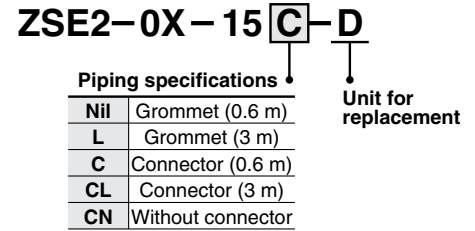
(2) Manifold base



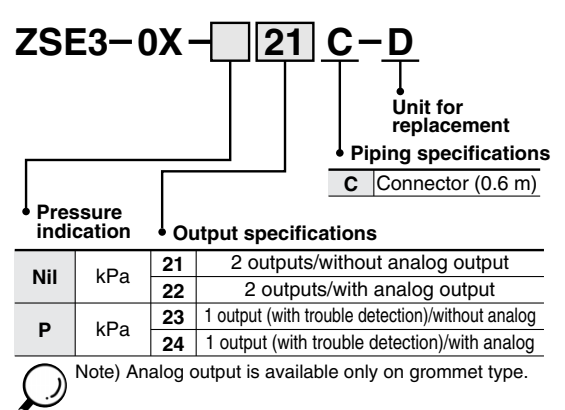
(3) Adsorption confirmation switch unit



(4) Vacuum switch unit



(5) Digital vacuum switch unit



Vacuum Pump System/Manifold Disassembly from Individual Unit

Manifold disassembly from individual unit

1. Remove Philips screws.
2. Remove cross-recessed head machine screw for precision machinery.
3. Mount plugs to valve unit.
4. Mount valve unit with Philips screws (P3200152-12) 3 pcs.
5. Mount vacuum switch to manifold with Philips screws.
Follow tightening screw torque on Table (1).

Note 1)
Even though screw type in use differs depending on the combination (Table (2)), screws for an individual unit and a manifold are common.

Table (2)

Combination	Part no.
Vacuum switch ZSE3, ZSP1	M2.5 x 51
Vacuum switch ZSE2	P3270148-39 (M2.5 x 39)
Filter unit ZX1-F	P3200152-12 (M2.5 x 28)

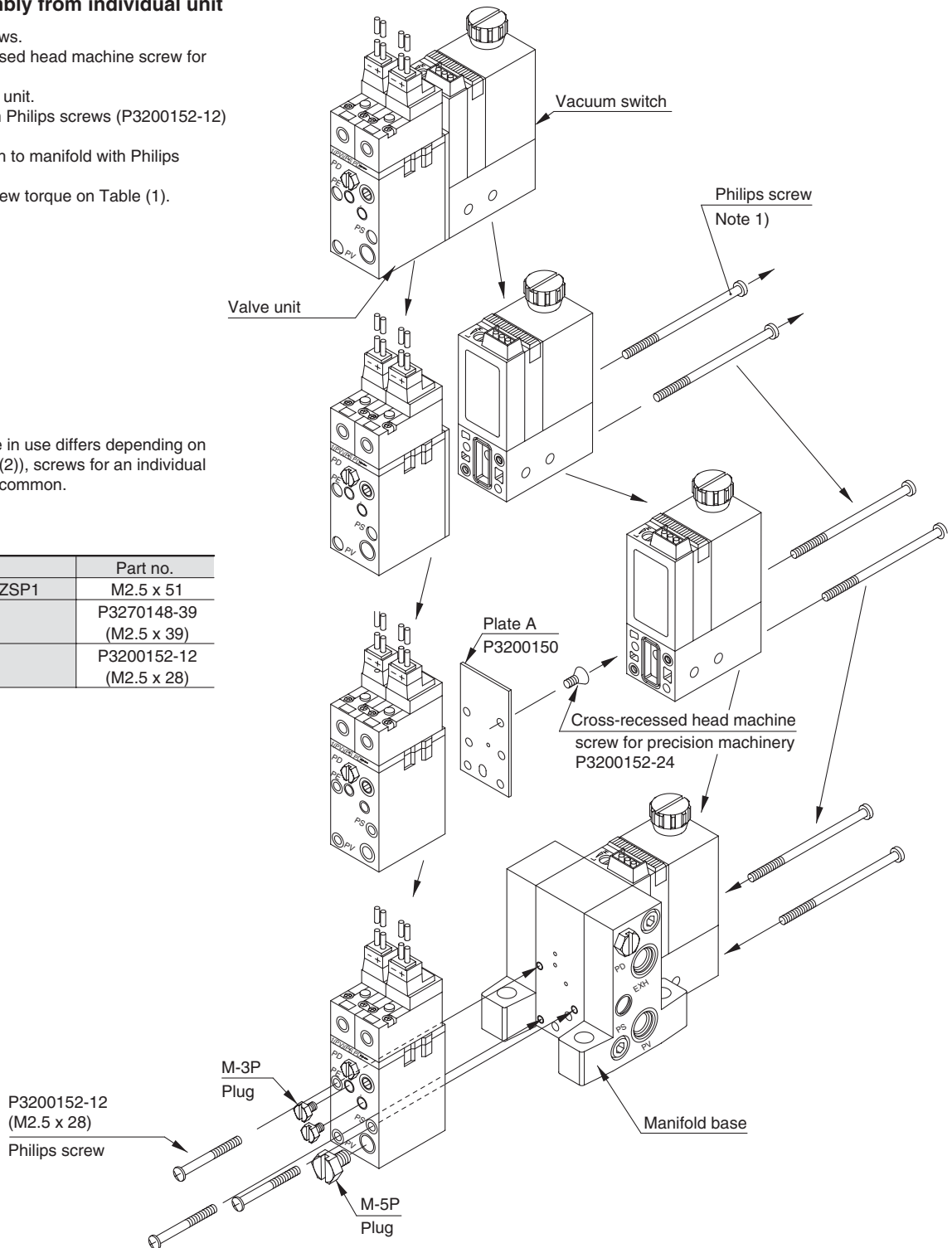


Table (1)

Part no.	Description	Quantity	Recommended tightening screw torque	In the case of manifold	Single unit
Note 1)	Philips screw	2	0.28 ± 0.1 (N·m)	Necessary	Necessary
P3200150	Plate A	1		Not necessary	Necessary
P3200152-24	Cross-recessed head machine screw for precision machinery	1	0.28 ± 0.1 (N·m)	Not necessary	Necessary
M-3P	Plug	2	0.46 ± 0.05 (N·m)	Necessary	Not necessary
M-5P	Plug	1	1.6 ± 0.15 (N·m)	Necessary	Not necessary
P3200152-12 (M2.5 x 28)	Philips screw	3	0.28 ± 0.1 (N·m)	Necessary	Not necessary

Ejector System/Manifold Disassembly from Individual Unit

Manifold disassembly from individual unit

1. Remove Philips screws.
2. Remove Philips screws, and then remove ejector assembly from valve unit.
3. Mount plugs to valve unit.
4. Mount valve unit with Philips screws (P3200152-12) 3 pcs.
5. Mount ejector assembly to manifold with Philips screw (M2.5 x 14) 1 pc.
6. Mount vacuum switch to manifold with Philips screws 2 pcs.

Note 1)
Even though screw type in use differs depending on the combination (Table (2)), screws for an individual unit and a manifold are common.
Follow tightening screw torque on Table 1.

Table (2)

Combination	Part no.
Vacuum switch ZSE3, ZSP1	M2.5 x 63
Vacuum switch ZSE2	M2.5 x 61
Filter unit ZX1-F	P3270148-39 (M2.5 x 39)

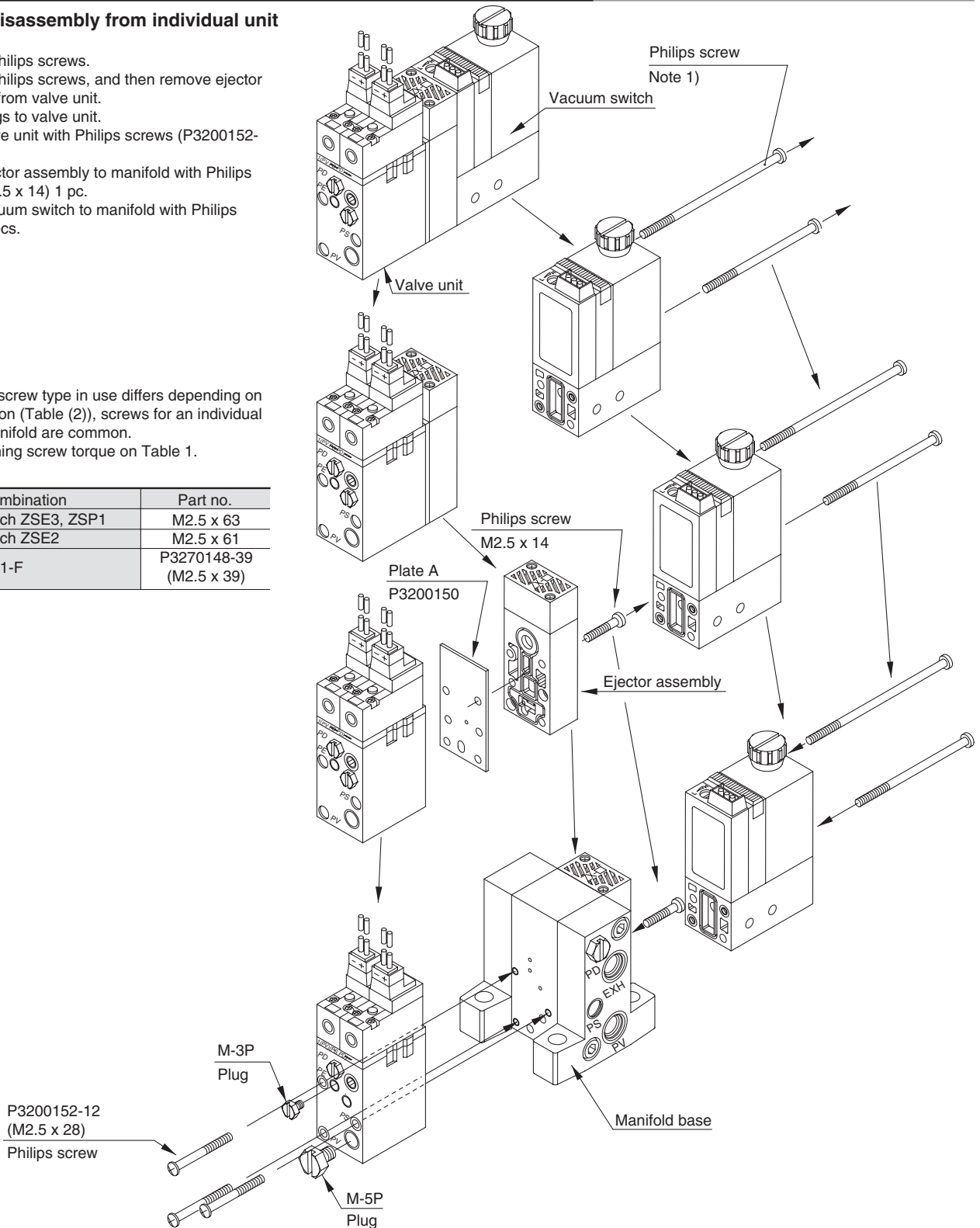


Table (1)

Part no.	Description	Quantity	Recommended tightening screw torque	In the case of manifold	Single unit
Note 1)	Philips screw	2	0.28 ± 0.1 (N·m)	Necessary	Necessary
P3200150	Plate A	1		Not necessary	Necessary
M2.5 x 14	Philips screw	1	0.28 ± 0.1 (N·m)	Necessary	Necessary
M-3P	Plug	1	0.46 ± 0.05 (N·m)	Necessary	Not necessary
M-5P	Plug	1	1.6 ± 0.15 (N·m)	Necessary	Not necessary
P3200152-12 (M2.5 x 28)	Philips screw	3	0.28 ± 0.1 (N·m)	Necessary	Not necessary

ZX

ZR

ZM

ZH

ZU

ZL

ZY

ZQ

ZF

ZP

ZCU

AMJ

Misc.